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REDUCING BIAS IN THE ASSESSMENT OF CULTURALLY AND LINGUISTICALLY DIVERSE POPULATIONS

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Note: Every attempt has been made to maintain the integrity of the printed text. In some cases, figures and tables have been reconstructed within the constraints of the electronic environment.

Preface

"Rust" and "Burnout" are two real processes that affect psychologists and speech language pathologists who administer tests they know do not test what the child actually knows. In a discussion with a long time friend and colleague the subject of "rust and rusting out" came up. He explained that "rust" is a process of accumulation caused from acting in ways that are professionally questionable, which take a great deal of time, and which are of little practical use. He further explained that a person slowly rusts from the inside. I responded that "burnout" for me was a sudden intense flame that resulted after smoldering over many years from being prevented either consciously or unconsciously, from doing what is in the best interest of children during the evaluation process. Utilizing tests that measure only one aspect, one point of view, and one way with no room for allowing the children the opportunity to demonstrate what they actually know and understand precludes children from contributing to the evaluation process.

Introduction

The Current Problem

Public Law 94-142 (1975) mandates that testing and evaluation procedures be nondiscriminatory. Evaluating school aged children who are bilingual and suspected of having a communicative disorder requires that an accurate picture of their communicative abilities be obtained in both the native and second language. This requires the use of nonbiased procedures or assessment procedures so that both languages are fully and fairly evaluated.

The process of assessing the communication abilities of limited English proficient children is in itself a difficult task. This is complicated by the limited number of bilingual speech-language pathologists available to conduct such assessments. Even among speech-language pathologists few have the background in the native language and the training necessary to conduct the type of assessment (Taylor, 1986) required when children speak a variety of second languages (Yup'ik, Athapaskan, Aleut, Tongan, Samoan, Tagalog, Panpango, Apache, Souis, Pima, or Navajo).

Conducting evaluation and assessment in a nondiscriminatory manner is further confounded because there are few assessment tools for many of the large established minority populations, and none exist for children who speak minority languages that are less established. In Western bush Alaska, the majority of the population speak a language other than English and, depending on geographic location, the language spoken varies. Further, languages spoken will be affected by the dialect spoken in a particular region. At this time there are no assessment tools for the formal evaluation of these native languages.

One additional difficulty faced by speech-language pathologists is limitations caused by increased case loads and number of schools served. These factors impinge on the available time necessary to conduct assessments. This situation is further complicated when the student to be assessed is bilingual. With case loads averaging about 45 to 50 students, pathologists' time becomes a premium. Yet the assessment of bilingual children demands that speech-language pathologists work closely with other professionals from a variety of disciplines. This collaboration can only help to facilitate appropriate referrals and improve the likelihood of valid evaluation and diagnosis of children with suspected communicative disorders.

Legal Precedence

The legal basis for the development and implementation of nondiscriminatory testing and procedures in the evaluation and assessment of culturally and linguistically diverse populations is well documented (Dunn, 1968; Martin, 1968; Kloss, 1971; Kirp, 1973; Education of the Handicapped Act, 1974; Grubb, 1974; Comprehensive Assessment Service Information System, 1976; Laosa, 1977; Levin, 1983; Mattes & Omark, 1984; Miller, 1984; Cummins, 1984; Salomone, 1986; Fradd & Vega, 1987; Wong, 1988; and Hamayan & Damico, 1991).

Legislation and litigation related to special and bilingual education have a long history. As early as 1827 the federal government was involved with assisting a specific handicapped population. The first Public Law (PL19-8) provided for the location of a Deaf and Dumb Asylum in the state of Kentucky. Twenty-eight years later PL 33-4 (1855) established a government hospital for the insane. Since that period five additional pieces of legislation (PL 38-52 (1864), PL 45-186 (1879), PL 65-178 (1918), PL 66-236 (1920), PL 78-113 (1943)) that affected the handicapped were passed (Kretschmer, in Hamayan et al., 1991).

Many legal cases regarding special populations have come before the courts. One of the major cases involved *Brown v. Board of Education* (1954) which established that segregated education based on race was unequal and unconstitutional. Since that court decision 11 additional public laws have been enacted that affect individuals with disabilities. In 1973, 30 years after the 1954 decision, PL 93-112 provided for equal access to services provided by any federal or federally funded project or program. That same year *Diana v. State Board of Education* established that testing be conducted in the child's native language.

It also required the use of nonverbal tests and the collection of extensive support data necessary to justify special education placement. A year later (1974), two decisions, *Lau v. Nichols* and *Wyatt v. Aderholt*, furthered the quality of services provided to children. In *Lau v. Nichols*, the decision established that it was necessary for Lau to receive instruction in his native language to provide him with a better opportunity for an education. As a further consequence, criteria for determining language dominance for students whose language is other than English have been developed to assist in providing appropriate instruction in a student's native language. In the latter case, *Wyatt v. Aderholt*, the right to equal treatment was established. This decision also established that treatment and educational standards and the right to related services must

be provided in the least restricted environment. In that same year *Serna v. Portales Municipal Schools* (1974) established federally funded bilingual programs. The need for the use of proficiency tests to determine student eligibility to bilingual programs was established by the decision handed down in *Aspira of New York, Inc., v. Board of Education of the City of New York* (1974). The last Public Law passed in 1974, PL 93-380, the predecessor to PL 94-142, established eligibility requirements in order to obtain federal funding. These requirements included full service goals with emphasis towards unserved children. They also provided for evaluation (nondiscriminatory testing) and placement protection. This law also extended services to bilingual populations.

The first and only public law (94-142) passed during 1975 about the rights of children in public schools merged several regulations that specifically were written to eliminate the discriminatory effects of standardized testing. It specifically addressed evaluation materials and procedures used to place children in special programs. It required that selection and administration of tests and procedures be racially and culturally nonbiased. The law also focused on the validity of tests and materials with respect to their use in the evaluation process as valid for the purposes for which they were intended. It also addressed the evaluation and placement of students and required that placement decisions be made on the basis of extensive data from various sources.

Since the enactment of PL 94-142 three additional laws, one of which extended services to Alaskan Natives, PL 95-561, under the Elementary and Secondary Education Act (ESEA) of 1978 was passed. This law also reauthorized and restructured existing programs that were funded by the ESEA. Six years later PL 98-511 (1984) of the ESEA amended Title VII to provide programs that included bilingual education for children with need for special education preschool through twelfth grade. In 1986 PL 99-457, the Education of All Handicapped Children, was enacted to provide mandatory services to children with special needs three years of age with some incentives to provide services to infants.

Five additional court decisions were handed down during this same nine year period that defined the services received by persons with disabilities. The first two decisions, *Jose P. v. Ambach* (1978) and *Dyrcia S. et al. v. Board of Education of the City of New York et al.* (1979), established timely evaluation and placement procedures for children identified with special needs. Also during this same period, a decision of what constituted a free and appropriate education was determined in *Rowley v. Hendrick Hudson Central School District and the State of New York* (1979). Two years later (1981) *Castaneda v. Pickard* established standards for reviewing remediation plans for special programs.

Considerations in Assessment and Evaluation

The use of tests in the assessment of children from bilingual bicultural backgrounds is a politically sensitive issue in the fields of speech-language pathology and special education (Mattes & Omark, 1984). Currently, as in the past, children whose language is other than English are, in many cases, misdiagnosed as having communicative disorders and placed in special education programs based on results from tests that were administered in English. No attention was given to the biased content and norms which reflect the values and experiences of the white, English speaking, middle class population (Mercer, 1980, 1983). A comprehensive speech and language assessment is vital because of the need to determine language difficulties, if any, which may be harming a child's performance in school. Bilingual children who perform unsatisfactorily in the school setting because of limited exposure to English and/or cultural differences need to be distinguished from children who demonstrate communicative disorders and who require special education intervention. When evaluating children suspected of a communicative disorder it becomes important to determine what is a difference versus what is considered a disorder (Mattes, 1984; Taylor,

1986). How can we assess children with limited English proficient abilities for possible disabilities when the children are not proficient in the language of testing? What types of assessment will not only satisfy legal requirements but also provide those who render services a clear guideline as to the specific areas of instruction that the students need? Speech-language pathologists should take into consideration the following variables when assessing culturally and linguistically diverse populations: bilingualism, proficiency, dominance, second language development, code switching, and pervasive medical conditions afflicting the community.

The meaning of bilingualism varies throughout the literature. Some researchers focus on the passive (listening and writing) competence in both languages in terms of their equality while others focus on the equal productive competence as in speaking and writing (Albert & Obler, 1978). When it comes to labels, "balanced" versus "nonbalanced" (Damico, 1991) are used to describe bilingual language development. An equal level of proficiency in the two languages in all aspects of communication is used to describe a balanced speaker of two languages. A greater proficiency in the primary or native language over the second language is the case for a nonbalanced speaker (Hamayan & Damico, 1991). It is important to consider that students come from linguistic backgrounds other than English, yet may be more proficient in English than in the native or primary language.

Language proficiency for the purposes of assessment refers to the amount of control the child has over language or languages. A child may have two languages and have equal comprehension proficiency in both but may use one primarily to speak. Paradise (1978) provides an excellent review of the stratification of language into different levels of organization with reference to receptive and expressive skills.

Language proficiency is not a static state but rather a constant state of fluctuation. Different settings will have an effect on language proficiency. A careful analysis of a child's specific skills for various contexts should be accomplished. Also, because a child's first language may not be the dominant language, both languages should be assessed to determine dominance. It is not possible to determine proficiency in the primary, native, or first language on the basis of proficiency in a second (English) language (Oller, 1979). Yet assessment personnel assume that the student with limited English proficiency is proficient in the non-English language (Shore, 1984; Valdez, 1969). At this time, nothing in the literature clearly defines the measurement of language proficiency (Gould, 1981; Oller & Perkins, 1978). However, of the three ways to look at language proficiency, (a) discrete point (Carroll, 1961; Lado, 1961), (b) integrative (Oller, 1973; Sommers, Erdige, & Peterson 1978; Spolsky, 1968a), and (c) pragmatic (Hamayan & Damico, 1991; Cohen, 1980; Oller, 1973, 1979; Savignon, 1983), the latter has the most promise for speech-language pathologists in assessing language proficiency. Language proficiency must be at the center of a valid assessment, for without it the child has not been truly assessed. Because neither dominance nor proficiency in a language can be automatically assumed, pathologists have all the more reason to assess in a comprehensive manner both the native or primary and English languages (Burt, Dulay, & McKeon, 1980).

Language dominance can vary depending on the context in which it is assessed. Results obtained may also vary depending on what is being evaluated. Because of these factors, speech-language pathologists must consider what dominance tests are actually measuring and the contexts in which the measurements are being obtained. For example, the James Language Dominance Test (James, 1974) looks at the comprehension and production of lexical-vocabulary items in both English and Spanish. In contrast to the James Language Dominance Test, the Bilingual Syntax Measure looks at only syntactic abilities in Spanish and English (Burt, Dulay, & Hernandez-Chavez, 1976). From a more pragmatic view, is it not as important to examine how much a given child knows (most dominance tests attempt to measure what a child knows divorced from context) as it would be to appraise the child's abilities to use each language effectively in meaningful

speaking contexts? Which ever language dominance tests are used, the results of such measures should be considered in conjunction with various language samples of natural communication and other data (Erickson & Omark, 1981). Many of the language dominance tests lack predictive validity (Cummins, 1981), and some have been published without reliable data such as Bilingual Syntax Measure (Silverman, Noa, Russell, & Molina, 1976; Watson, Omark, Grouell, & Heller, 1981). However, Gerken (1978) examined the James Language Dominance Test, Comprehension of Oral Language Test and the Los Amigos Verbal Language Scales and found that all are significantly correlated for language dominance. Yet each test measures different aspects of language.

Understanding the process of first and second language development and their interrelationship to one another is essential. The belief that second language development is, to a high degree, a different process from first language acquisition is not supported by research (Garcia, 1983). Studies on the acquisition of language in bilingual children suggest that the simultaneous learning of two languages does not differ significantly from the acquisition of a single language (Swain, 1972; Kessler, 1971). Research in the areas of morpheme acquisition has indicated that children (Chinese and Spanish) basically follow the same order to acquisition whether they are learning English as a first language or second language (Dulay & Burt, 1974b). It has also been suggested (Swain, 1972) that bilingual development is approximately 4 to 5 months behind monolingual language development as a result of the child having to learn more and differentiate between the languages than a single language learner. This could have predictive value in addition to prognostic value when looking at delays in language learning. When evaluating the language of bilingual children, language history should not be overlooked. How and when the child developed a second language will give insight as to how the language in question functions. For example, if the child learned two languages at the same time from birth, his language development can be characterized as simultaneous in its development. If the child learned a second language after the age of three and beyond his language can be considered sequential in its development (Swain, 1972; Krashen, Long, & Scarcella, 1979; Krashen, 1981; Kessler, 1971).

Even though basic similarities exist among first and second language learners, as is the case for simultaneous learners, the speech-language pathologist should be aware of important differences when a second language is learned or is being learned. These differences will be demonstrated to the extent that the first, native, or primary language interferes with the second. Interference may affect the order of acquisition of specific aspects of language such as the learning of phonological processes--rules, grammatical structures, and vocabulary (Kessler, 1971; Hamayan & Damico, 1991). However, if a child's first language is adequately developed and there is no indication of delayed development, it will provide the basis for the transfer of what has been mastered (phonological rules, language structures, and vocabulary) in the first language to the second language. This is especially true if the second language is related to the first. It is believed that if the first language is not developed to the level of proficiency to support the second language, negative consequences in both cognitive and educational domains could occur (Cummins, 1979). Thus two factors, interference and transference, should be considered. With respect to transference, there is less of a likelihood that information obtained in one language, English, would transfer to another less similar like Yup'ik. The result of this linguistic distance between Yup'ik and English could result in lower vocabulary, temporal-sequential language structures, conditional language structures, and more. In some cases, language structures not found in one language (e.g., Yup'ik) exist in the second language, English. This factor is important because transfer from English to Yup'ik would not occur and vice versa. The speech-language pathologist, not understanding transference or the lack of it, could interpret the lower vocabulary and missing language structures in English as the basis of a communication disorder. However, transference can be a help or a hindrance.

When a speech sound, vocabulary, or language structure is common in the student's two languages, transfer is advantageous resulting in positive transfer for the speaker. An example of this positive transfer occurs at the phonological-speech sound level, in which the Spanish /s/ sound is similar to the one found in English. However if there are differences between the languages, and transfer occurs, interference may result. At the phonological level the /sh/ sound in English does not exist in Spanish and, as a consequence, interference in the form of a substitution /ch/ for /sh/ will occur.

Interference may not be negative depending on the context in which it is used. In these cases the speaker uses vocabulary in one language and inserts it into the other language because the vocabulary word does not exist in the native or primary language. For example in the German language, the word "horizon" does not exist, and thus it is inserted into the German language and made to sound like German but, in fact, it is derived from English. Another example of vocabulary insertion has occurred in the Yup'ik language, which has permanently borrowed approximately 60 words from English and several hundred from Russian with their phonologies being changed to correspond to Yup'ik phonology (Jacobson, 1984). Speakers use this insertion strategy to convey more exact meaning rather than attempting to explain via description what is being intended, seen, or felt. A similar strategy is used when a child with a greater lexical inventory in the primary, first, or native language converses in the second language. Because he has not developed the level of vocabulary necessary to converse in the chosen language, he will embed vocabulary words during his conversation with a speaker who would understand the lexical items inserted. This is considered a normal process in the development of the second language. As the child is exposed to the second language he begins to attain the language in chunks as was the case in learning the first language. The child picks up phrases that are frequently used by other speakers in everyday conversation.

When the child has learned and has been exposed for a sufficient amount of time to the second language, the process regarding knowledge of the second language becomes more refined with respect to the rules of grammar, phonology (sounds), semantics (meaning), and pragmatics (the use of the language). This knowledge leads to a metalinguistic awareness of language. Children as young as nine years of age have been documented discussing the rules of language (Hamayan, 1978). Three year olds indicate a distinction between first and second languages. The speech-language pathologist needs to be aware that errors will result as the child strives to use the language. At this point many teachers as well as speech language pathologists who are unfamiliar with second language development will ask the student to produce near perfect sentences. When the student fails to do so, the person who does not understand second language development will formulate an opinion that the child is having language and speech difficulty in addition to difficulty with memory. The child will produce two forms of errors: the first will be in the form of interference, and the second will be developmental.

Developmental errors occur in the same way as errors occur with speakers learning a first language. The errors have nothing to do with disordered language but are the result of errors that come about because of the complexities of the language. The difficulties demonstrated may be due to a lack of solid foundation in the child's native, primary, or first language. An examiner will not know this unless the child is assessed in both languages. Both English speakers and second language learners will produce sentences such as "Where she is going?" and "Why you going?" (Damico, 1991). It has been suggested (Hamayan & Damico, 1991) that these errors reflect the general characteristics of the language and are common to all persons learning English as a second language.

Regardless of the subordinate cause, be it normal second language acquisition or language learning impairment, communicative difficulties have a limited range of observable behaviors. These problem behaviors (Damico, 1991) result from a limited English proficiency that affects vocabulary selection,

fluency, grammatical form, and comprehension at the basic level (Omark & Watson, 1985; Paradise, 1978; Van Riper, 1972; Linares, 1983) to more profound difficulties involving conversation and academic dialogue (Cheng, 1987; Damico, Oller & Storey, 1983). When these difficulties are observed in limited English proficient students, they only indicate difficulty in the second language, which is in most cases English. This is important because current practices used by speech language pathologists do not differentiate effectively between what is normal and what is impaired communication in bilingual children. Language use patterns are virtually unknown to many speech language pathologists. Subsequently, many of these students who are referred for communication difficulties are evaluated, misdiagnosed, inappropriately placed in speech language programs, and may be, at a later date, placed in special education programs as language learning disabled. Clearly, speech-language pathologists select the tests and interpret the results.

Sanchez (1983) discusses code switching as verbal interaction that involves switching from one linguistic system to another. A common misconception among teachers regarding code switching is that it is indicative of an undeveloped language system resulting in poor bilingual skills. On the contrary, the main reason for code switching is not the inability to come up with the right word or phrase in one language. Code switching develops through high levels of proficiency in both languages.

Switching takes place for several reasons. Switching occurs when the speaker is attempting to convey meaning that could not be conveyed in the other language. It can also result when the speaker wants to emphasize a point or change the topic. It also occurs when vocabulary words in one language do not exist for the language being used. Code switching is an important consideration because of the role it takes in the social situation in which it happens. When analyzing a bilingual student's language behavior, the speech-language pathologist must take into account this behavior and differentiate the reasons that speakers naturally use code switching from the forced use of code switching. Forced code switching occurs in children and learners who are weak in at least one of the languages being used. The key to determining a disorder would be to assess each language separately as to when the language is used inappropriately in the social context. The speech-language pathologist must be aware of the complexities of language proficiency in addition to the various forms of bilingualism and the need to evaluate a student's other language(s). Second language proficiency is affected by a variety of factors not necessarily concerned with cognitive abilities. Because of the complexities of second language learning, errors and difficulties are to be expected. A close analysis of the patterns encountered in the use of the second language will reveal that code switching is not only expected but is natural when a student switches from one language to another in the context of a conversation. Language patterns should be assessed, and the data collected should be used to determine the student's level or stage of second language development. Finally, the development of positive attitudes in the native, primary, or first language and culture only enhance the learning of the second language.

Thus far discussion has focused on the student to be assessed. There are also additional considerations with respect to the evaluators and what they bring into the assessment process. Pragmatic influences on the assessment process are many and are discussed elsewhere (Cummins, 1984; Miller, 1984; Trueba, 1987). When contextual variables are separated, two factors, "cultural" and "linguistic" considerations, emerge as influences on the assessment process. Culture has been described by some as what an individual must know to function within a particular society (Spradley, 1980). Knowledge and the linguistic basis on the other hand are acquired as a result of experience in a culturally specific environment (e.g., life on the Kuskokwim Delta in Western Alaska). The cultural and linguistic experiences may differ from the evaluator's or school system's experiences. Assessment personnel need to learn about the student's culture. Without this framework evaluators will not be able to make appropriate interpretations of a student's performance, and as

a result, suggested recommendations will discourage students from performing optimally in the school setting. Speech-language pathologists should be aware that cultural insensitivity is assessment bias. For example, in the Yup'ik culture asking questions is considered impolite. Yet many of the language tests (e.g., the Oral Vocabulary subtest of the Test of Language Development (TOLD-P)) requires the Yup'ik student to respond to various questions. Another area of consideration is proximity. People of different cultures use, share, and value space differently (Condon, Peters, & Carmen, 1979). Other variables such as touching, gender, and eye contact all have an effect on a student's performance. Most standardized tests are not developed with cultural diversity in mind, and when the examiner adds cultural and linguistic insensitivity to the assessment process, the results are a perfect formula for the misdiagnosis of a child's true abilities.

Strategies that Reduce Bias in Assessment

Five general strategies have been identified and proposed in the literature that when used appropriately reduce bias in assessment (Chamberlin & Mendinos Landurand, 1991). They include the following: increased knowledge/awareness of cultural and linguistic background, determination of level of acculturation, controlling cultural variables, determining language or languages used in testing, and the use of interpreters. These strategies will be discussed briefly in this section.

Knowledge and awareness of cultural and linguistic background are vital when assessing children for communicative disorders. These include the information discussed in the previous section "Considerations in Assessment." The educational level of the parents, current status of employment, the number of children in the family, and income level will help determine a child's acculturation.

Once the student's cultural and linguistic dimensions and acculturation are clear, the speech-language pathologist should focus on managing the factors in the test environment that result in bias and affect the student's performance. Evaluators must analyze formal tests for specific cultural content and style(s) they expect of the students. Cultural variables that work against students must be taken into account, and testing procedures should be modified. For example, if a student's culture views time differently from that of the dominant culture, tests that are timed must be modified or time factors eliminated. Another example is to take a look at a student's physical movement patterns such as a lack of eye contact during the evaluation. They may need to be taken into consideration when assessing students, and modifications necessary to accommodate the child's freedom of movement must be incorporated.

Determining the language/languages used in testing is an important strategy in reducing bias. Whether or not two languages are to be used in formal assessment of a limited English proficient student will depend on the reason for testing. If the purpose of testing is to determine a learning disability, both languages must be used. The manner in which the student's two languages are used must be consistent with and relevant to the purpose of testing and the skills of the student. Determining a given student's skills can be accomplished by gathering data in several settings. Data could be obtained at home, school, and with different types of peer groups and adults on a variety of topics ranging from simple to complex. These topics should reflect the student's linguistic experience. The object is to distinguish a disability, in this case, a communicative disorder, from what might be normal second language development in a student with limited English proficiency. If a child demonstrates low levels of proficiency in both languages, both should be used together in the evaluation process instead of one (Cummins, 1986).

The last strategy in decreasing bias in assessment includes the use of interpreters. Interpreters and their use in the assessment process have been questioned (Juarez, 1983; Langdon, 1988; Marcos, 1979). When poorly trained interpreters have been used, the results obtained in many instances may be worse than if no

interpreter were used (Toliver-Weddington & Meyerson, 1983). Hernandez (1987) discussed reality factors related to the selection, training, and certification of Native Alaskan paraprofessionals and the cultural limitations that interfere with job performance. However, when well-trained interpreters are used and involved early in the assessment process, the result greatly improves both assessment and diagnosis of exceptional children. Many studies have reported positive results when using interpreters in very different cultural and linguistic settings (Cargo & Annahatak, 1985; Godwin, 1977; Marr, Natter, & Wilcox, 1980).

A detailed discussion of the selection and use of interpreters is reviewed by Langdon (1988) and Hernandez (1987). A well-trained interpreter could be used to collect prereferral data with respect to the language(s) used by the child at home or with friends, family, and teachers. Additional information regarding family background such as the number of siblings and their ages and extended family information could also be obtained by the interpreter. Educational data could be collected at this time; the number of schools attended, attendance patterns, and types of educational programs the child has been involved in are important data to collect. Sensitive information regarding medical history of the parent (e.g., pregnancy and delivery) and the subsequent developmental history prove valuable in ruling out intrinsic variables. In many instances, the interpreter can bridge the bond between the monocultural examiner, the students, and their families.

Current Assessment Practices

A review of the literature suggests four primary concerns with the current communicative assessment approach (Mercer, 1983; Damico, 1991). They include lack of linguistic realism (Leonard, Prutting, Perozzi, & Berkley, 1978; Muma, 1978; Crystal, 1987; Oller, 1983), lack of authenticity (Seliger, 1982; Shohamy & Reves, 1985), poor psychometric strength (Darley, 1979; McCauley & Swisher, 1984; Olswang & Carpenter, 1978; Shorr & Dale, 1984), and inherent and unavoidable bias (Berry, 1966; Oller, 1979; Bloom, 1981). The first concern correlates to the treatment of language and communication in tests that are currently used by speech-language pathologists. Many of the tests make an effort to follow psychological instead of linguistic properties. This effort at establishing psychometric properties results in tests that focus on discrete observable behaviors and as a consequence are dissimilar from behaviors observed in natural communication. The effect of this focused approach (second concern) is that it has little to do with real communication since it does not attempt to look at the variations that occur in communication (Miller 1981; Selinker, Swain, & Dumas, 1975).

A third concern regarding the current approach to assessment is based on the methods that are used to develop the tests. These methods do not take the child into account; instead they focus on ensuring that the results obtained are replicable and are based on a standardized, statistically norm-referenced model. The tests themselves require maximal control of the stimulus items via administration, expected responses, and contexts for those responses. This approach moves away from what would be considered "authentic language" (Shohamy & Reves, 1985). Current assessment tools are actually poor predictors of language and communication abilities (Bowerman, 1976; Taylor, 1977; Allen, Bliss, & Timmons, 1981; Mims & Camden, 1986). Because language is removed from the naturally occurring contexts where it functions most optimally, the results obtained fail to determine how well a child can communicate. The research suggests that current tests fail to adhere to their own conceptual approach (Lieberman & Michael, 1986).

The last concern is directly related to the bilingual/bicultural student. Language tests are biased with regard to the culture in which they were developed. All language tests have an inherent bias because in their design and construction they reflect the uniquely specific cultural elements of the culture that produces them. The inherent biases in tests are unavoidable, and that is why it is not possible to produce a culture-free test (Berry, 1966; Bloom, 1981).

Clearly a different set of evaluation criteria than those used with monolingual students or a criterion that will take into account monolingualism within the context of this new assessment approach is necessary. This approach must result in a description regarding an individual's current level of proficiency and determine which variables have affected the students' acquisition of language. This approach should compare students' performance relative to that of their peers. Peers should share to some extent common cultural, language, and linguistic experiences and attitudes if a valid assessment is to result. This approach should attempt to satisfy the legal requirements as specified in PL 94-142. The descriptive assessment approach attempts to assess communication and its function in holistic ways within natural contexts.

Descriptive Assessment

The descriptive approach to communicative assessment will more effectively limit bias and help make determinations between children who are language learning impaired or communicative disordered from those who are in the normal process of learning a second language. The speech-language pathologist must determine a student's proficiency as a communicator by looking at the functional aspects of communication in three areas: (a) effectiveness of meaning during the communicative act, (b) fluency of meaning of the message, and (c) appropriateness of the communication (Fey, 1986). Description in these three areas will begin to address the question of proficiency. It will also result in a decision based on the three constraints about whether the communicative difficulty is based on poor language proficiency. If the descriptive analysis points to error in communication due to natural second language learning the evaluation is terminated. In this analysis the student's strengths and strategies should be described with recommendations for the bilingual program the child participates in or for the regular classroom teacher with no communication intervention needed. The results of such an assessment presuppose that the difficulties encountered by the student were extrinsic. However, if the finding is that the child indicated a communicative disorder, evaluation and further analysis are required.

Explanatory analysis comprises the second level of the assessment. The question to be answered is "What are the causal facts" for the communicative difficulties observed (Hamayan & Damico, 1991)? At this point in the assessment, the speech-language pathologist must look at and determine whether the difficulties observed are based on language and cultural differences or due to some form of intrinsic language learning impairment. However the assessor begins the evaluation with the belief that the difficulties experienced by the student are the result of some outside environmental factors. This is where it is determined if the student is experiencing linguistic interference or difficulties due to cultural differences. With respect to language, both languages are assessed. If a disorder is found it will be observed in both languages. The speech-language pathologist then describes the causes for the difficulties that are observed. Recommendations are made for language intervention, and further suggestions and recommendations are provided for the bilingual staff to consider. In many instances speech language pathologists and bilingual programs don't have communication or a formal process in which to share and exchange information regarding a specific child. Speech language pathologists need to work closely with the bilingual staff in order to facilitate a valid assessment.

Some of the tools needed to conduct such an assessment include "communicative referencing" (Bloom & Lahey, 1978) and serial observation in natural settings where communication takes place (Oller & Damico, 1991), which also emphasizes "relativism" in the transactional behavior (McLean & Snyder McLean, 1978; Muma, 1978). As part of the descriptive analysis, the student will be assessed in terms of three aspects: oral monologic (Brown, Anderson, Schillcock, & Yule, 1984), oral dialog (Holland & Forbes, 1986; Leonard, Prutting, Perozzi, & Berkley, 1978; Leonard & Weiss, 1983), and contextually constrained materials

(Archer & Edward, 1982; Nelson, 1985; Vetter, 1982; Bassett, Whittington, & Staton-Spicer, 1978). A brief description of each will be discussed in the next section. Because of the nature of the assessment the speech-language pathologist may choose to audiotape or, more preferably, video tape the student's assessment. The data collected will serve to better support a diagnosis of an intrinsic language/communicative disorder should it be the case.

An oral monologic assessment should contain three different transactional tasks that include static tasks that require the student to describe relationships among objects such as having the listener follow directions to perform a process with a finished product as a result of listening and following instructions. Dynamic tasks should include, for example, the use of narratives and stories from the child's own experiences (Applebee, 1978). Abstract tasks that require the student to discuss abstract notions as would be the case in preplanned arguing or justification (Brown, Anderson, Schillcock, & Yule 1984) should be planned last. Note that these tasks are arranged from simple to more difficult.

The next area in the assessment is the oral dialogic assessment. Many speech language pathologists have recommended this method because the assessment is not highly standardized or norm-referenced (Holland & Forbes 1986; Leonard, Prutting et al., 1978; Leonard & Weiss, 1983). These procedures require that language sampling be transcribed and analyzed. Several analysis procedures are found in the literature that focus on the functional aspects of communication (Loban, 1976). Procedures developed by Blank and Franklin (1980) focus on the clarity of the communication, fluency, and other areas of language structure. The Adolescent Conversational Analysis developed by Larson and McKinley (1987) looks at the role of the listener in conversation and the role of the speaker. Damico (1985a) developed the Clinical Discourse Analysis, a language sampling procedure that analyzes communicative functions, paralinguistic features, and verbal and nonverbal rules communicated by the speaker. Another resource, Grice's 17 communicative-referenced behaviors as listed in Grice's cooperative principal, could be included in a descriptive analysis. The information obtained from this analysis would help determine a communicator's conversational proficiency (Grice, 1975). Research supports the use of this tool as it can effectively identify students with communicative disorders (Damico & Oller, 1980; Damico, Oller, & Storey, 1983).

Other assessment tools developed for preschool children take the form of an interview with the parents or caretakers of preschoolers. It has been reported that this procedure has concurrent validity with oral language sampling data (Bretherton, McNew, Synder, & Bates, 1983). The Systematic Assessment of Early Communicative Development (Norris, 1989) provides an extensive profile of the child's communicative abilities by interrelating cognitive and social behavior in addition to pragmatic communicative behavior. An additional tool, Spotting Language Problems (Damico & Oller, 1985), uses a screening procedure that has been found to be strongly valid and reliable with monolingual and bilingual populations (Bishop, 1988; Damico & Oller, 1985). Other scales or protocols include the Bilingual Oral Language Development (Mattes & Omark, 1984) and the Pragmatic Protocol (Prutting & Kirchner, 1983). The latter has been determined as reliable (Duncan & Perozzi, 1987) and differentiates between language disorders versus language differences (Ferrer & Damico, 1988). By no means are these the only assessment tools available to the assessor.

The third aspect of the descriptive assessment deals with contextually constrained procedures. The speech-language pathologist needs to focus on two areas of communicative competencies. The first is those competencies that deal with oral communicative interaction and the language of academics. The first has been discussed elsewhere in this paper (Archer & Edward, 1982; Bassett, Whittington, & Staton-Spicer 1978). In the latter, a number of assessment tools have been developed for the classroom environment. Nelson (1985) and Vetter (1982) developed separate tools which focus on a set of communicative behaviors

and question formats necessary to perform well within the classroom setting. The behaviors can be used to document poor communicative proficiency. Communicative abilities in group settings within the classroom have been developed by Larson and McKinley (1987). The Curriculum Analysis Form assesses the skills needed to participate in group discussions. These skills include comprehension, attitudes in the classroom, use of textbooks, and understanding test taking behaviors. One additional tool focuses on communication difficulties within the context of the classroom. The Classroom Communication Screening Procedure for Early Adolescence (Simon, 1985, 1989) uses communicative and criterion-referenced behaviors to determine if a student is in need of further language testing. According to the authors, this measure is aimed at the student who is in transition from elementary to secondary school.

One other and by no means the last is a less natural procedure called the "cloze technique." In this technique a reading passage or an oral text is supplied to the student with every nth (e.g., every 7th word) word deleted. The student fills in the blanks based on the context of the material read. Proponents of this procedure believe that the students must use their internal system of grammatical and vocabulary knowledge to respond to the blanks in order to retain a meaningful text (Oller, 1979; Laesch & van Kleeck, 1987). Cloze technique procedures are actually pragmatic procedures that accurately reveal the students' underlying language proficiency (Hamayan, Kwait, & Perlman, 1985).

Summary

In summary, the assessment of culturally and linguistically diverse populations has been fraught with a myriad of problems. These problems range from lack of understanding by assessors of the cultural and linguistic characteristics that a given child brings to the assessment arena to knowingly conducting evaluation and diagnosis of children with limited English proficiency. Current assessment practices use diagnostic tests that are statistically unreliable and based on the psychological model which is divorced from the nature of what language is and how it actually functions for a particular child. As a result, injury to the child in the form of misdiagnosis occurs. Speech-language pathologists have a responsibility to ensure that this special population is evaluated in the most appropriate manner possible. Many studies have been conducted and procedures developed, but these do not matter unless changes are made to help in a positive manner the student in the assessment process. We, as a profession, need to examine what our biases are, be they conscious or unconscious attitudes we bring to the assessment arena. We have to move beyond the attitude of learned helplessness taught to us in graduate school and what has become comfortable in our daily routine and move towards attitudes that promote flexibility and creativity and place children's best interests at the crux of all evaluations conducted. For this to occur we must accept the idea that all students are unique and vary in terms of their environment and the knowledge that is acquired within that specific environment. Burnout is not the late hours put into the job but the feeling that we experience when we are prevented (externally or internally) from doing what is in the best interest of the children we serve.

Recommendations

Speech-language pathologists must develop a formal process in which to share and exchange information with bilingual programs. The process will vary depending on the type of bilingual program that exists at the district level.

Pathologists should work closely with bilingual personnel when the assessment involves children who are bilingual.

Those who continue to use formal tests which yield low scores should balance these results with results

obtained from nonstandard evaluation procedures. Follow the rule of the lower the score the greater the need to use nonstandard approaches.

Create a list of factors that help reduce bias and develop and refine it as you become more aware of the students' needs and your skill level improves.

Develop language and cultural characteristics for each of the populations you provide services to starting with the largest minority group.

Consider medical factors e.g., drug and or alcohol exposure and otitis media in the performance when analyzing data obtained.

Use well trained interpreters when possible. If none exist, look to community resources or develop a training program of your own or in conjunction with the Bilingual department at the district level.

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